

**WHAT IS CLAIMED:**

1. A purified DNA molecule encoding a human nNR1 protein wherein said protein comprises the amino acid sequence as follows:

MSSDDRHLGS SCGSFIKTEP SSPSSGIDAL SHHSPSGSSD ASGGFGLALG  
THANGLDSPP MFAGAGLGGT PCRKSYEDCA SGIMEDSAIK CEYMLNAIPK  
RLCLVCGDIA SGYHYGVASC EACKAFFKRT IQGNIEYSCP ATNECEITKR  
RRKSCQACRF MKCLKVGMLK EGVRLDRVRG GRQKYKRRLD SESSPYLSLQ  
ISPPAKKPLT KIVSYLLVAE PDKLYAMPPP GMPEGDIKAL TTLCDLADRE  
LVVIIGWAKH IPGFSSLSLG DQMSLLQSAW MEILILGIVY RSLPYDDKLV  
YAEDYIMDEE HSRLAGLLEL YRAILQLVRR YKKLKVEKEE FVTLKALALA  
NSDSMYIEDL EAVQKLQDLL HEALQDYELS QRHEEPWRTG KLLLTPLPLR  
QTAAKAVQHF YSVKLQ GKVP MHKLFLEMLE AKAWARADSL QEWRPLEQVP  
SPLHRATKRQ HVHFLTPLPP PPSVAWVGTA QAGYHLEVFL PQRAGWPRAA,  
as set forth in three-letter abbreviation in SEQ ID NO:2.

2. An expression vector for expressing a human nNR1 protein in a recombinant host cell wherein said expression vector comprises a DNA molecule of claim 1.

3. A host cell which expresses a recombinant human nNR1 protein wherein said host cell contains the expression vector of claim 2.

4. A process for expressing a human nNR1 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 2 into a suitable host cell; and,

(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

5. A purified DNA molecule encoding a human nNR1 protein wherein said protein consists of the amino acid sequence as follows:

5 MSSDDRHLGS SCGSFIKTEP SSPSSGIDAL SHHSPSGSSD ASGGFGLALG  
 THANGLDSPP MFAGAGLGGT PCRKSYEDCA SGIMEDSAIK CEYMLNAIPK  
 RLCLVCGDIA SGYHYGVASC EACKAFFKRT IQGNIEYSCP ATNECEITKR  
 RRKSCQACRF MKCLKVGMLK EGVRLDRVRG GRQKYKRRLD SESSPYLSLQ  
 ISPPAKKPLT KIVSYLLVAE PDKLYAMPPP GMPEGDIKAL TTLCDLADRE  
 LVVIIGWAKH IPGFSSLSLG DQMSLLQSAW MEILILGIVY RSLPYDDKLQ  
 10 YAEDYIMDEE HSRLAGLLEL YRAILQLVRR YKKLKVEKEE FVTLKALALA  
 NSDSMYIEDL EAVQKLQDLL HEALQDYELS QRHEEPWRTG KLLLTLPPLR  
 QTAAKAVQHF YSVKLQGVKVP MHKLFLEMLE AKAWARADSL QEWRPLEQVP  
 SPLHRATKRQ HVHFLTPLPP PPSVAWVGTA QAGYHLEVFL PQRAGWPRAA, as  
 set forth in three-letter abbreviation in SEQ ID NO:2.

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6. An expression vector for expressing a human nNR1 protein in a recombinant host cell wherein said expression vector comprises a DNA molecule of claim 5.

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7. A host cell which expresses a recombinant human nNR1 protein wherein said host cell contains the expression vector of claim 6.

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8. A process for expressing a human nNR1 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 6 into a suitable host cell; and,

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(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

9. A purified DNA molecule encoding a human nNR1 protein wherein said DNA molecule comprises the nucleotide sequence as set forth in SEQ ID NO:1, as follows:

GAATATGATG ACCCTAATGC AACAAATATCT AACATACTAT CCGAGCTTCG  
 5 GTCATTTGGA AGAAGTGCAG ATTTTCCTCC TTCAAAATTA AAGTCAGGTT  
 ATGGAGAACA TGTATGCTAT GTTCTTGATT GCTTCGCTGA AGAAGCATTG  
 AAATATATTG GTTTCACCTG GAAAAGGCCA ATATACCCAG TAGAAGAATT  
 AGAAGAAGAA AGCGTTGCAG AAGATGATGC AGAATTAACA TTAAATAAAG  
 TGGATGAAGA ATTTGTGGAA GAAGAGACAG ATAATGAAGA AAACTTTATT  
 10 GATCTCAACG TTTTAAAGGC CCAGACATAT CACTTGATA TGAACGAGAC  
 TGCCAAACAA GAAGATATTT TGGAATCCAC AACAGATGCT GCAGAATGGA  
 GCCTAGAAGT GGAACGTGTA CTACCGCAAC TGAAAGTCAC GATTAGGACT  
 GACAATAAGG ATTTGGAGAAT CCATGTTGAC CAAATGCACC AGCACAGAAG  
 TGGAATTGAA TCTGCTCTAA AGGAGACCAA GGGATTTTTC GACAACTCC  
 15 ATAATGAAAT TACTAGGACT TTGGAAAAGA TCAGCAGCCG AGAAAAGTAC  
 ATCAACAATC AGCCGGGAGC CCATGGAGCA CTGTCCTCAG AGATGCGCAG  
 GTTAGGCTCA CTGCTAGGC CAGGCCCCACC TTAGTCACTG TGGACTGGCA  
 ATGGAAGCTC TTCTGGACA CACCTGCCCT AGCCCTCACC CTGGGGTGGA  
 AGAGAAATGA GCTTGGCTTG CAACTCAGAC CATTCACGG AGGCATCCTC  
 20 CCCTTCCCTG GGCTGGTGAA TAAAGTTTC CTGAGGTCAA GGACTTCCTT  
 TTCCCTGCCA AAATGGTGTC CAGAACTTTG AGGCCAGAGG TGATCCAGTG  
 ATTTGGGAGC TGCAGGTCAC ACAGGCTGCT CAGAGGGCTG CTGAACAGGA  
 TGTCTCGGA CGACAGGCAC CTGGGCTCCA GCTGCGGCTC CTTTCATCAAG  
 ACTGAGCCGT CCAGCCCGTC CTCGGGCATA GATGCCCTCA GCCACCACAG  
 25 CCCAGTGGC TCGTCCGACG CCAGCGGCGG CTTTGGCCTG GCCCTGGGCA  
 CCCACGCCAA CGGTCTGGAC TCGCCACCCA TGTTTGCAGG CGCCGGGCTG  
 GGAGGCACCC CATGCCGCAA GAGCTACGAG GACTGTGCCA GCGGCATCAT  
 GGAGGACTCG GCCATCAAGT GCGAGTACAT GCTCAACGCC ATCCCCAAGC  
 GCCTGTGCCT CGTGTGCGGG GACATTGCCT CTGGCTACCA CTACGGCGTG  
 30 GCCTCCTGCG AGGCTTGCAA GGCCTTCTTC AAGAGGACTA TCCAAGGGAA  
 CATTGAGTAC AGCTGCCCCG CCACCAACGA GTGCGAGATC ACCAAACGGA  
 GCGCAAGTC CTGCCAGGCC TGCCGCTTCA TGAAATGCCT CAAAGTGGGG  
 ATGCTGAAGG AAGGTGTGCG CCTTGATCGA GTGCGTGGAG GCCGTCAGAA  
 ATACAAGCGA CGGCTGGACT CAGAGAGCAG CCCATACCTG AGCTTACAAA  
 35 TTTCTCCACC TGCTAAAAAG CCATTGACCA AGATTGTCTC ATACCTACTG

GTGGCTGAGC CGGACAAGCT CTATGCCATG CCTCCCCCTG GTATGCCTGA  
 GGGGGACATC AAGGCCCTGA CCACTCTCTG TGACCTGGCA GACCGAGAGC  
 TTGTGGTCAT CATTGGCTGG GCCAAGCACA TCCCAGGCTT CTCAAGCCTC  
 TCCCTGGGGG ACCAGATGAG CCTGCTGCAG AGTGCCTGGA TGGAAATCCT  
 5 CATCCTGGGC ATCGTGTTACC GCTCGCTGCC CTACGACGAC AAGCTGGTGT  
 ACGCTGAGGA CTACATCATG GATGAGGAGC ACTCCCGCCT CGCGGGGCTG  
 CTGGAGCTCT ACCGGGCCAT CCTGCAGCTG GTACGCAGGT ACAAGAAGCT  
 CAAGGTGGAG AAGGAGGAGT TTGTGACGCT CAAGGCCCTG GCCCTCGCCA  
 ACTCCGATTC CATGTACATC GAGGATCTAG AGGCTGTCCA GAAGCTGCAG  
 10 GACCTGCTGC ACGAGGCACT GCAGGACTAC GAGCTGAGCC AGCGCCATGA  
 GGAGCCCTGG AGGACGGGCA AGCTGCTGCT GACACTGCCG CTGCTGCGGC  
 AGACGGCCGC CAAGGCCGTG CAGCACTTCT ATAGCGTCAA ACTGCAGGGC  
 AAAGTGCCCA TGCACAAACT CTTCTGGAG ATGCTGGAGG CCAAGGCCTG  
 GGCCAGGGCT GACTCCCTTC AGGAGTGGAG GCCACTGGAG CAAGTGCCCT  
 15 CTCCCCTCCA CCGAGCCACC AAGAGGCAGC ATGTGCATTT CTTAACTCCC  
 TTGCCCCCTC CCCCATCTGT GGCCTGGGTG GGCCTGCTC AGGCTGGATA  
 CCACCTGGAG GTTTTCCTTC CGCAGAGGGC AGGTTGGCCA AGAGCAGCTT  
 AGAGGATCTC CCAAGGATGA AAGAATGTCA AGCCATGATG GAAAATGCCC  
 CTTCCAATCA GCTGCCTTCA CAAGCAGGGA TCAGAGCAAC TCCCCGGGGA  
 20 TCCCCAATCC ACGCCCTTCT AGTCCAACCC CCCTCAATGA GAGAGGCAGG  
 CAGATCTCAC CCAGCACTAG GACACCAGGA GGCCAGGGAA AGCATCTCTG  
 GCTCACCATG TAACATCTGG CTTGGAGCAA GTGGGTGTTT TGCACACCAG  
 GCAGCTGCAC CTCCTGGAT CTAGTGTTCG TGCAGGTGAC CTCCTTCAG  
 AGCCCCCTTA GCAGAGTGGG GCGGAAGTCC TGATGGTTGG TGTCCATGAG  
 25 GTGGAAG (SEQ ID NO:1).

10. A DNA molecule of claim 9 which comprises from about nucleotide 950 to about nucleotide 2452 of SEQ ID NO:1.

30 11. An expression vector for expressing a human nNR1 protein wherein said expression vector comprises a DNA molecule of claim 9.

12. An expression vector for expressing a human nNR1 protein wherein said expression vector comprises a DNA molecule of claim 11.

13. A host cell which expresses a recombinant human nNR1 protein wherein said host cell contains the expression vector of claim 11.

14. A host cell which expresses a recombinant human nNR1 protein wherein said host cell contains the expression vector of claim 12.

15. A process for expressing a human nNR1 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 11 into a suitable host cell; and,

(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

16. A purified DNA molecule encoding a human nNR1 protein wherein said DNA molecule consists of the nucleotide sequence as set forth in SEQ ID NO:1, as follows:

GAATATGATG ACCCTAATGC AACAAATATCT AACATACTAT CCGAGCTTCG  
 GTCATTTGGA AGAACTGCAG ATTTTCCTCC TTCAAAATTA AAGTCAGGTT  
 ATGGAGAACA TGTATGCTAT GTTCTTGATT GCTTCGCTGA AGAAGCATTG  
 AAATATATTG GTTTCACCTG GAAAAGGCCA ATATACCCAG TAGAAGAATT  
 AGAAGAAGAA AGCGTTGCAG AAGATGATGC AGAATTAACA TTAAATAAAG  
 TGGATGAAGA ATTTGTGGAA GAAGAGACAG ATAATGAAGA AAACTTTATT  
 GATCTCAACG TTTTAAAGGC CCAGACATAT CACTTGGATA TGAACGAGAC  
 TGCCAAACAA GAAGATATTT TGGAATCCAC AACAGATGCT GCAGAATGGA  
 GCCTAGAAGT GGAACGTGTA CTACCGCAAC TGAAAGTCAC GATTAGGACT

GACAATAAGG ATTGGAGAAT CCATGTTGAC CAAATGCACC AGCACAGAAG  
 TGGAATTGAA TCTGCTCTAA AGGAGACCAA GGGATTTTGT GACAAACTCC  
 ATAATGAAAT TACTAGGACT TTGGAAAAGA TCAGCAGCCG AGAAAAGTAC  
 ATCAACAATC AGCCGGGAGC CCATGGAGCA CTGTCCTCAG AGATGCGCAG  
 5 GTTAGGCTCA CTGTCTAGGC CAGGCCACC TTAGTCACTG TGGACTGGCA  
 ATGGAAGCTC TTCCTGGACA CACCTGCCCT AGCCCTCACC CTGGGGTGGG  
 AGAGAAATGA GCTTGGCTTG CAACTCAGAC CATTCCACGG AGGCATCCTC  
 CCCTTCCCTG GGCTGGTGAA TAAAAGTTTC CTGAGGTCAA GGACTTCCTT  
 TTCCCTGCCA AAATGGTGTC CAGAACTTTG AGGCCAGAGG TGATCCAGTG  
 10 ATTTGGGAGC TGCAGGTCAC ACAGGCTGCT CAGAGGGCTG CTGAACAGGA  
 TGTCTCGGA CGACAGGCAC CTGGGCTCCA GCTGCGGCTC CTTCATCAAG  
 ACTGAGCCGT CCAGCCCGTC CTCGGGCATA GATGCCCTCA GCCACCACAG  
 CCCAGTGGC TCGTCCGACG CCAGCGGCGG CTTTGGCCTG GCCCTGGGCA  
 CCCACGCCAA CGGTCTGGAC TCGCCACCCA TGTTTGCAGG CGCCGGGCTG  
 15 GGAGGCACCC CATGCCGCAA GAGCTACGAG GACTGTGCCA GCGGCATCAT  
 GGAGGACTCG GCCATCAAGT GCGAGTACAT GCTCAACGCC ATCCCCAAGC  
 GCCTGTGCCT CGTGTGCGGG GACATTGCCT CTGGCTACCA CTACGGCGTG  
 GCCTCCTGCG AGGCTTGCAA GGCCTTCTTC AAGAGGACTA TCCAAGGGAA  
 CATTGAGTAC AGCTGCCCCG CCACCAACGA GTGCGAGATC ACCAAACGGA  
 20 GGC GCAAGTC CTGCCAGGCC TGCCGCTTCA TGAAATGCCT CAAAGTGGGG  
 ATGCTGAAGG AAGGTGTGCG CTTGATCGA GTGCGTGGAG GCCGTCAGAA  
 ATACAAGCGA CGGCTGGACT CAGAGAGCAG CCCATACCTG AGCTTACAAA  
 TTTCTCCACC TGCTAAAAAG CCATTGACCA AGATTGTCTC ATACCTACTG  
 GTGGCTGAGC CGGACAAGCT CTATGCCATG CCTCCCCCTG GTATGCCTGA  
 25 GGGGGACATC AAGGCCCTGA CCACTCTCTG TGACCTGGCA GACCGAGAGC  
 TTGTGGTCAT CATTGGCTGG GCCAAGCACA TCCCAGGCTT CTCAAGCCTC  
 TCCCTGGGGG ACCAGATGAG CTTGCTGCAG AGTGCCTGGA TGGAAATCCT  
 CATCCTGGGC ATCGTGTACC GCTCGCTGCC CTACGACGAC AAGCTGGTGT  
 ACGCTGAGGA CTACATCATG GATGAGGAGC ACTCCCGCCT CGCGGGGCTG  
 30 CTGGAGCTCT ACCGGGCCAT CTTGCAGCTG GTACGCAGGT ACAAGAAGCT  
 CAAGGTGGAG AAGGAGGAGT TTGTGACGCT CAAGGCCCTG GCCCTCGCCA  
 ACTCCGATTC CATGTACATC GAGGATCTAG AGGCTGTCCA GAAGCTGCAG  
 GACCTGCTGC ACGAGGCACT GCAGGACTAC GAGCTGAGCC AGCGCCATGA  
 GGAGCCCTGG AGGACGGGCA AGCTGCTGCT GACACTGCCG CTGCTGCGGC  
 35 AGACGGCCGC CAAGGCCGTG CAGCACTTCT ATAGCGTCAA ACTGCAGGGC

AAAGTGCCCA TGCACAAACT CTTCTGGAG ATGCTGGAGG CCAAGGCCTG  
GGCCAGGGCT GACTCCCTTC AGGAGTGGAG GCCACTGGAG CAAGTGCCCT  
CTCCCCCTCA CCGAGCCACC AAGAGGCAGC ATGTGCATTT CCTAACTCCC  
TTGCCCCCTC CCCCATCTGT GGCCTGGGTG GGCAGTCTC AGGCTGGATA  
5 CCACCTGGAG GTTTTCCTTC CGCAGAGGGC AGGTTGGCCA AGAGCAGCTT  
AGAGGATCTC CCAAGGATGA AAGAATGTCA AGCCATGATG GAAAATGCCC  
CTTCCAATCA GCTGCCTTCA CAAGCAGGGA TCAGAGCAAC TCCCCGGGGA  
TCCCCAATCC ACGCCCTTCT AGTCCAACCC CCCTCAATGA GAGAGGCAGG  
CAGATCTCAC CCAGCACTAG GACACCAGGA GGCCAGGGAA AGCATCTCTG  
10 GCTCACCATG TAACATCTGG CTTGGAGCAA GTGGGTGTTC TGCACACCAG  
GCAGCTGCAC CTCAGTGGAT CTAGTGTTCG TCGAGTGAC CTCAGTTCAG  
AGCCCCTCTA GCAGAGTGGG GCGGAAGTCC TGATGGTTGG TGTCCATGAG  
GTGGAAG (SEQ ID NO:1).

15 17. A DNA molecule of claim 16 which consists of  
nucleotide 950 to about nucleotide 2452 of SEQ ID NO:1.

20 18. An expression vector for expressing a human nNR1  
protein wherein said expression vector comprises a DNA molecule of  
claim 16.

25 19. An expression vector for expressing a human nNR1  
protein wherein said expression vector comprises a DNA molecule of  
claim 17.

20. A host cell which expresses a recombinant human  
nNR1 protein wherein said host cell contains the expression vector of  
claim 18.

30 21. A host cell which expresses a recombinant human  
nNR1 protein wherein said host cell contains the expression vector of  
claim 19.

22. A process for expressing a human nNR1 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 18 into a suitable host cell; and,

(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

23. A purified DNA molecule encoding a human nNR2 protein wherein said protein comprises the amino acid sequence as follows:

MDSVELCLPE SFSLHYEEEL LCRMSNKDRH IDSSCSSFIK TEPSSPASLT  
 DSVNHHSPGG SSDASGSYSS TMNGHQGLD SPPLYPSAPI LGGSGPVRKL  
 YDDCSSTIVE DPQTKCEYML NSMPKRLCLV CGDIASGYHY GVASCEACKA  
 FFKRTIQGNI EYSCPATNEC EITKRRRKSC QACRFMKCLK VGMLKEGVRL  
 DRVRGGRQKY KRRIDAENSP YLNPQLVQPA KKPYNKIVSH LLVAEPEKIY  
 AMPDPTVPDS DIKALTTLCD LADRELVVII GWAKHIPGFS TSLADQMSL  
 LQSAWMEILI LGVVYRSLSF EDELVYADDY IMDEDQSKLA GLLDLNNAIL  
 QLVKKYKSMK LEKEEFVTLK AIALANSDSM HIEDVEAVQK LQDVLHEALQ  
 DYEAGQHMED PRRAGKMLMT LPLLRTSTK AVQHFYNIKL EGKVPMHKLF  
 LEMLEAKV, as set forth in three-letter abbreviation in SEQ ID NO:4.

24. An expression vector for expressing a human nNR2 protein in a recombinant host cell wherein said expression vector comprises a DNA molecule of claim 23.

25. A host cell which expresses a recombinant human nNR2 protein wherein said host cell contains the expression vector of claim 24.

26. A process for expressing a human nNR2 protein in a recombinant host cell, comprising:



(a) transfecting the expression vector of claim 24 into a suitable host cell; and,

(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

27. A purified DNA molecule encoding a human nNR2 protein wherein said protein consists of the amino acid sequence as follows:

MDSVELCLPE SFSLHYEEEL LCRMSNKDRH IDSSCSSFIK TEPSSPASLT  
 DSVNHHSPGG SSDASGSYSS TMNGHQGLD SPPLYPSAPI LGSGPVRKL  
 YDDCSSTIVE DPQTKCEYML NSMPKRLCLV CGDIASGYHY GVASCEACKA  
 FFKRTIQGNI EYSCPATNEC EITKRRRKSC QACRFMKCLK VGMLKEGVRL  
 DRVRGGRQKY KRRIDAENSP YLNPQLVQPA KKPYNKIVSH LLVAEPEKIY  
 AMPDPTVPDS DIKALTTLCD LADRELVVII GWAKHIPGFS TSLADQMSL  
 LQSAWMEILI LGVVYRSLSF EDELVYADDY IMDEDQSKLA GLLDLNNAIL  
 QLVKKYKSMK LEKEEFVTLK AIALANSDSM HIEDVEAVQK LQDVLHEALQ  
 DYEAGQHMED PRRAGKMLMT LPLLRQTSTK AVQHFYNIKL EGKVPMHKLF  
 LEMLEAKV, as set forth in three letter code as SEQ ID NO 4.

28. An expression vector for expressing a human nNR2 protein in a recombinant host cell wherein said expression vector comprises a DNA molecule of claim 27.

29. A host cell which expresses a recombinant human nNR1 protein wherein said host cell contains the expression vector of claim 28.

30. A process for expressing a human nNR2 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 28 into a suitable host cell; and,

(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

31. A purified DNA molecule encoding a human nNR2 protein wherein said DNA molecule comprises the nucleotide sequence as set forth in SEQ ID NO:3, as follows:

10 GCGGGCCGCC AGTGTGGTGG AATTCGGCTT GTCACTAGGA GAACATTTGT  
 GTTAATTGCA CTGTGCTCTG TCAAGGAAAC TTTGATTTAT AGCTGGGGTG  
 CACAAATAAT GGTTGCCGGT CGCACATGGA TTCGGTAGAA CTTTGCCTTC  
 CTGAATCTTT TTCCCTGCAC TACGAGGAAG AGCTTCTCTG CAGAATGTCA  
 15 AACAAAGATC GACACATTGA TTCCAGCTGT TCGTCCCTCA TCAAGACGGA  
 ACCTTCCAGC CCAGCCTCCC TGACGGACAG CGTCAACCAC CACAGCCCTG  
 GTGGCTCTTC AGACGCCAGT GGGAGCTACA GTTCAACCAT GAATGGCCAT  
 CAGAACGGAC TTGACTCGCC ACCTCTCTAC CCTTCTGCTC CTATCCTGGG  
 AGGTAGTGGG CCTGTCAGGA AACTGTATGA TGACTGCTCC AGCACCATTG  
 20 TTGAAGATCC CCAGACCAAG TGTGAATACA TGCTCAACTC GATGCCCAAG  
 AGACTGTGTT TAGTGTGTGG TGACATCGCT TCTGGGTACC ACTATGGGGT  
 AGCATCATGT GAAGCCTGCA AGGCATTCTT CAAGAGGACA ATTCAAGGCA  
 ATATAGAATA CAGCTGCCCT GCCACGAATG AATGTGAAAT CACAAAGCGC  
 AGACGTAAAT CCTGCCAGGC TTGCCGCTTC ATGAAGTGTT TAAAAGTGGG  
 25 CATGCTGAAA GAAGGGGTGC GTCTTGACAG AGTACGTGGA GGTGCGCAGA  
 AGTACAAGCG CAGGATAGAT GCGGAGAACA GCCCATACCT GAACCCTCAG  
 CTGGTTCAGC CAGCCAAAAA GCCATATAAC AAGATTGTCT CACATTTGTT  
 GGTGGCTGAA CCGGAGAAGA TCTATGCCAT GCCTGACCCT ACTGTCCCCG  
 ACAGTGACAT CAAAGCCCTC ACTACACTGT GTGACTTGGC CGACCGAGAG  
 30 TTGGTGTTTA TCATTGGATG GGCGAAGCAT ATTCCAGGCT TCTCCACGCT  
 GTCCCTGGCG GACCAGATGA GCCTTCTGCA GAGTGCTTGG ATGGAAATTT  
 TGATCCTTGG TGTCGTATAC CGGTCTCTTT CATTTGAGGA TGAACCTGTC  
 TATGCAGACG ATTATATAAT GGACGAAGAC CAGTCCAAAT TAGCAGGCCT  
 TCTTGATCTA AATAATGCTA TCCTGCAGCT GGTAAAGAAA TACAAGAGCA  
 35 TGAAGCTGGA AAAAGAAGAA TTTGTCACCC TCAAAGCTAT AGCTCTTGCT

AATTCAGACT CCATGCACAT AGAAGATGTT GAAGCCGTTC AGAAGCTTCA  
 GGATGTCTTA CATGAAGCGC TGCAGGATTA TGAAGCTGGC CAGCACATGG  
 AAGACCCTCG TCGAGCTGGC AAGATGCTGA TGACACTGCC ACTCCTGAGG  
 CAGACCTCTA CCAAGGCCGT GCAGCATTTT TACAACATCA AACTAGAAGG  
 5 CAAAGTCCCA ATGCACAAAC TTTT'TTTTGGGA AATGTTGGAG GCCAAGGTCT  
 GACTAAAAGC TCCCTGGGCC TTCCCATCCT TCATGTTGAA AAAGGGAAAA  
 TAAACCCAAG AGTGATGTCG AAGAACTTA GAGTTTAGTT AACACATCA  
 AAAATCAACA GACTGCACTG ATAATTTAGC AGCAAGACTA TGAAGCAGCT  
 TTCAGATTCC TCCATAGGTT CCTGATGAGT TCTTTCTACT TTCTCCATCA  
 10 TCTTCTTTCC TCTTTCTTCC CACATTTCTC TTTCTCTTTA TTTT'TCTCC  
 TTTTCTTCTT TCACCTCCCT TATTTCTTTG CTTCTTTCAT TCCTAGTTCC  
 CATTCTCCTT TATTTTCTTC CCGTCTGCCT GCCTTCTTTC TTTTCTTTAC  
 CTACTCTCAT TCCTCTCTTT TCTCATCCTT CCCCTTTTTT CTAAATTTGA  
 AATAGCTTTA GTTTAAAAAA AAAAATCCTC CCTTCCCCCT TTCCTTTCCC  
 15 TTTCTTTCCCT TTTTCCCTTT CCTTTTCCCT TTCCTTTCCCT TTCCTCTTGA  
 CCTTCTTTCC ATCTTTCTTT TTCTTCCTTC TGCTGCTGAA CT'TTAAAAAG  
 AGGTCTCTAA CTGAAGAGAG ATGGAAGCCA GCCCTGCCAA AGGATGGAGA  
 TCCATAATAT GGATGCCAGT GAACTTATTG TGAACCATAC CGTCCCCAAT  
 GACTAAGGAA TCAAAGAGAG AGAACCAACG TTCCTAAAAG TACAGTGCAA  
 20 CATATACAAA TTGACTGAGT GCAGTATTAG ATTTTCATGGG AGCAGCCTCT  
 AATTAGACAA CTTAAGCAAC GTTGCATCGG CTGCTTCTTA TCATTGCTTT  
 TCCATCTAGA TCAGTTACAG CCATTTGATT CCTTAATTGT TTTT'TCAAGT  
 CTTCCAGGTA TTTGTTAGTT TAGCTACTAT GTAAC'TTTTT CAGGGAATAG  
 TTTAAGCTTT ATTCATTCAT GCAATACTAA AGAGAAATAA GAATACTGCA  
 25 ATTTTGTGCT GGCTTTGAAC AATTACGAAC AATAATGAAG GACAAATGAA  
 TCCTGAAGGA AGATTTT'TAA AAATGTTTTG TTTCTTCTTA CAAATGGAGA  
 TTTT'TTTGTA CCAGCTT'TAC CACTTTTTCAG CCATTTATTA ATATGGGAAT  
 TTAAC'TTACT CAAGCAATAG TTGAAGGGAA GGTGCATATT ATCACGGATG  
 CAATTTATGT TGTGTGCCAG TCTGGTCCCA AACATCAATT TCTTAACATG  
 30 AGCTCCAGTT TACCTAAATG TTCACTGACA CAAAGGATGA GATTACACCT  
 ACAGTGACTC TGAGTAGTCA CATATATAAG CACTGCACAT GAGATATAGA  
 TCCGTAGAAT TGTCAGGAGT GCACCTCTCT ACTTGGGAGG TACAATTGCC  
 ATATGATTTT TAGCTGCCAT GGTGGTTAGG AATGTGATAC TGCCTGTTTG  
 CAAAGTCACA GACCTTGCCT CAGAAGGAGC TGTGAGCCAG TATTCATTTA  
 35 AGAGAATTCC ACCACACTGG CGGCCCGCGC TTGAT (SEQ ID NO:3).

32. A DNA molecule of claim 31 which comprises from about nucleotide 126 to about nucleotide 1382 of SEQ ID NO:3.

5 33. An expression vector for expressing a human nNR2 protein wherein said expression vector comprises a DNA molecule of claim 31.

10 34. An expression vector for expressing a human nNR2 protein wherein said expression vector comprises a DNA molecule of claim 32.

15 35. A host cell which expresses a recombinant human nNR2 protein wherein said host cell contains the expression vector of claim 33.

20 36. A host cell which expresses a recombinant human nNR2 protein wherein said host cell contains the expression vector of claim 34.

37. A process for expressing a human nNR2 protein in a recombinant host cell, comprising:

25 (a) transfecting the expression vector of claim 33 into a suitable host cell; and,

(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR1 protein from said expression vector.

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38. A purified DNA molecule encoding a human nNR2 protein wherein said DNA molecule consists of the nucleotide sequence as set forth in SEQ ID NO:3, as follows:

5 GCGGGCCGCC AGTGTGGTGG AATTCGGCTT GTCACTAGGA GAACATTTGT  
 GTTAATTGCA CTGTGCTCTG TCAAGGAAAC TTTGATTTAT AGCTGGGGTG  
 CACAAATAAT GGTTGCCGGT CGCACATGGA TTCGGTAGAA CTTTGCCTTC  
 CTGAATCTTT TTCCCTGCAC TACGAGGAAG AGCTTCTCTG CAGAATGTCA  
 AACAAAGATC GACACATTGA TTCCAGCTGT TCGTCCTTCA TCAAGACGGA  
 ACCTTCCAGC CCAGCCTCCC TGACGGACAG CGTCAACCAC CACAGCCCTG  
 10 GTGGCTCTTC AGACGCCAGT GGGAGCTACA GTTCAACCAT GAATGGCCAT  
 CAGAACGGAC TTGACTCGCC ACCTCTCTAC CCTTCTGCTC CTATCCTGGG  
 AGGTAGTGGG CCTGTCAGGA AACTGTATGA TGACTGCTCC AGCACCATTG  
 TTGAAGATCC CCAGACCAAG TGTGAATACA TGCTCAACTC GATGCCCAAG  
 AGACTGTGTT TAGTGTGTGG TGACATCGCT TCTGGGTACC ACTATGGGGT  
 15 AGCATCATGT GAAGCCTGCA AGGCATTCTT CAAGAGGACA ATTCAAGGCA  
 ATATAGAATA CAGCTGCCCCT GCCACGAATG AATGTGAAAT CACAAAGCGC  
 AGACGTAAAT CCTGCCAGGC TTGCCGCTTC ATGAAGTGTT TAAAAGTGGG  
 CATGCTGAAA GAAGGGGTGC GTCTTGACAG AGTACGTGGA GGTCCGCAGA  
 AGTACAAGCG CAGGATAGAT GCGGAGAACA GCCCATACCT GAACCCTCAG  
 20 CTGGTTCAGC CAGCCAAAAA GCCATATAAC AAGATTGTCT CACATTTGTT  
 GGTGGCTGAA CCGGAGAAGA TCTATGCCAT GCCTGACCCT ACTGTCCCCG  
 ACAGTGACAT CAAAGCCCTC ACTACACTGT GTGACTTGGC CGACCGAGAG  
 TTGGTGGTTA TCATTGGATG GGCGAAGCAT ATTCCAGGCT TCTCCACGCT  
 GTCCCTGGCG GACCAGATGA GCCTTCTGCA GAGTGCTTGG ATGGAAATTT  
 25 TGATCCTTGG TGTCGTATAC CGGTCTCTTT CATTTGAGGA TGAACCTTGT  
 TATGCAGACG ATTATATAAT GGACGAAGAC CAGTCCAAAT TAGCAGGCCT  
 TCTTGATCTA AATAATGCTA TCCTGCAGCT GGTAAAGAAA TACAAGAGCA  
 TGAAGCTGGA AAAAGAAGAA TTTGTACCCC TCAAAGCTAT AGCTCTTGCT  
 AATTCAGACT CCATGCACAT AGAAGATGTT GAAGCCGTTT AGAAGCTTCA  
 30 GGATGTCTTA CATGAAGCGC TGCAGGATTA TGAAGCTGGC CAGCACATGG  
 AAGACCCTCG TCGAGCTGGC AAGATGCTGA TGACACTGCC ACTCCTGAGG  
 CAGACCTCTA CCAAGGCCGT GCAGCATTTT TACAACATCA AACTAGAAGG  
 CAAAGTCCCA ATGCACAAAC TTTTTTTTGA AATGTTGGAG GCCAAGGTCT  
 GACTAAAAGC TCCCTGGGCC TTCCCATCCT TCATGTTGAA AAAGGGAAAA  
 35 TAAACCCAAG AGTGATGTCG AAGAACTTA GAGTTTAGTT AACAAACATCA

AAAATCAACA GACTGCACTG ATAATTTAGC AGCAAGACTA TGAAGCAGCT  
 TTCAGATTCC TCCATAGGTT CCTGATGAGT TCTTTCTACT TTCTCCATCA  
 TCTTCTTTCC TCTTTCTTCC CACATTTCTC TTTCTCTTTA TTTTTTCTCC  
 TTTTCTTCTT TCACCTCCCT TATTTCTTTG CTTCTTTTCAT TCCTAGTTCC  
 5 CATTCTCCTT TATTTTCTTC CCGTCTGCCT GCCTTCTTTT TTTTCTTTAC  
 CTACTCTCAT TCCTCTCTTT TCTCATCCTT CCCCTTTTTT CTAAATTTGA  
 AATAGCTTTA GTTTAAAAAA AAAAATCCTC CCTTCCCCCT TTCCTTTCCC  
 TTTCTTTCTT TTTTCCCTTT CCTTTTCCCT TTCCTTTTCT TTCCTCTTGA  
 CCTTCTTTCC ATCTTTCTTT TTCTTCCTTC TGCTGCTGAA CTTTTAAAAG  
 10 AGGTCTCTAA CTGAAGAGAG ATGGAAGCCA GCCCTGCCAA AGGATGGAGA  
 TCCATAATAT GGATGCCAGT GAACTTATTG TGAACCATA CCGTCCCCAAT  
 GACTAAGGAA TCAAAGAGAG AGAACCAACG TTCCTAAAAG TACAGTGCAA  
 CATATACAAA TTGACTGAGT GCAGTATTAG ATTTTCATGGG AGCAGCCTCT  
 AATTAGACAA CTTAAGCAAC GTTGCATCGG CTGCTTCTTA TCATTGCTTT  
 15 TCCATCTAGA TCAGTTACAG CCATTGATT CCTTAATTGT TTTTCAAGT  
 CTTCAGGTA TTTGTTAGTT TAGCTACTAT GTAACTTTTT CAGGGAATAG  
 TTTAAGCTTT ATTCATTCAT GCAATACTAA AGAGAAATAA GAATACTGCA  
 ATTTTGTGCT GGCTTTGAAC AATTACGAAC AATAATGAAG GACAAATGAA  
 TCCTGAAGGA AGATTTTAA AAATGTTTTG TTTCTTCTTA CAAATGGAGA  
 20 TTTTTTTGTA CCAGCTTTAC CACTTTTCAG CCATTTATTA ATATGGGAAT  
 TTAACCTTACT CAAGCAATAG TTGAAGGGAA GGTGCATATT ATCACGGATG  
 CAATTTATGT TGTGTGCCAG TCTGGTCCCA AACATCAATT TCTTAACATG  
 AGCTCCAGTT TACCTAAATG TTCACTGACA CAAAGGATGA GATTACACCT  
 ACAGTGACTC TGAGTAGTCA CATATATAAG CACTGCACAT GAGATATAGA  
 25 TCCGTAGAAT TGTCAGGAGT GCACCTCTCT ACTTGGGAGG TACAATTGCC  
 ATATGATTTT TAGCTGCCAT GGTGGTTAGG AATGTGATAC TGCCTGTTTG  
 CAAAGTCACA GACCTTGCCT CAGAAGGAGC TGTGAGCCAG TATTCATTTA  
 AGAGAATTCC ACCACACTGG CGGCCCGCGC TTGAT (SEQ ID NO:3).

30 39. A DNA molecule of claim 38 which consists of  
 nucleotide 126 to about nucleotide 1382 of SEQ ID NO:3.

35 40. An expression vector for expressing a human nNR2  
 protein wherein said expression vector comprises a DNA molecule of  
 claim 38.

41. An expression vector for expressing a human nNR2 protein wherein said expression vector comprises a DNA molecule of claim 39.

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42. A host cell which expresses a recombinant human nNR2 protein wherein said host cell contains the expression vector of claim 40.

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43. A host cell which expresses a recombinant human nNR2 protein wherein said host cell contains the expression vector of claim 41.

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44. A process for expressing a human nNR2 protein in a recombinant host cell, comprising:

(a) transfecting the expression vector of claim 40 into a suitable host cell; and,

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(b) culturing the host cells of step (a) under conditions which allow expression of said the human nNR2 protein from said expression vector.